(11) EP 0 786 519 A3

(12)

EUROPEAN PATENT APPLICATION

- (88) Date of publication A3: 14.10.1998 Bulletin 1998/42
- (43) Date of publication A2: 30.07.1997 Bulletin 1997/31
- (21) Application number: 97100117.7
- (22) Date of filing: 07.01.1997
- (84) Designated Contracting States:

 AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC

 NL PT SE

 Designated Extension States:

 AL LT LV RO SI
- (30) Priority: 05.01.1996 US 9861
- (71) Applicant: HUMAN GENOME SCIENCES, INC. Rockville, MD 20850-3338 (US)
- (72) Inventors:
 - Kunsch, Charles A.
 Gaithersburg, Maryland 20882 (US)

- (51) Int CI.⁶: **C12N 15/31**, G06F 17/30, C12N 1/21, C12P 21/02, C12Q 1/68, C07K 16/12, C07K 14/31, A61K 39/085 // (C12N1/21, C12R1:445)
 - Choi, Gil H.
 Rockville, Maryland 20850 (US)
 - Barash, Steven C.
 Rockville, Maryland 20850 (US)
 - Dillon, Patrick J.
 Gaithersburg, Maryland 20879 (US)
 - Fannon, Michael R.
 Silver Spring, Maryland 20906 (US)
 - Rosen, Craig A. Laytonsville, Maryland 20882 (US)
- (74) Representative: VOSSIUS & PARTNER
 Postfach 86 07 67
 81634 München (DE)
- (54) Staphylococcus aureus polynucleotides and sequences
- (57) The present invention provides polynucleotide sequences of the genome of *Staphylococcus aureus*, polypeptide sequences encoded by the polynucleotide sequences, corresponding polynucleotides and polypeptides, vectors and hosts comprising the polynu-

cleotides, and assays and other uses thereof. The present invention further provides polynucleotide and polypeptide sequence information stored on computer readable media, and computer-based systems and methods which facilitate its use.



Application Number

which under Rule 45 of the European Patent Convention EP 97 10 0117 shall be considered, for the purposes of subsequent proceedings, as the European search report

	DOCUMENTS CONSIDERE	D TO BE RELEVANT	,	
Category	Citation of document with indicati of relevant passages	on, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.6)
Х	"EMBL Database entry no. L36472, 17th Novembands. VOLD: "An unusiorganization in Staphy EMBL NUCLEOTIDE SEQUEN	per 1994, C.J. GREEN ual rRNA-tRNA gene lococcus aureus""	1-29	C12N15/31 G06F17/30 C12N1/21 C12P21/02 C12Q1/68 C07K16/12 C07K14/31 A61K39/085 //(C12N1/21, C12R1:445)
Y	BURKS C. ET AL.: "GenI NUCLEIC ACIDS RESEARCH vol. 20, 1992, OXFORD pages 2065-2069, XP0020 * the whole document *	GB,	1-29	
Y	US 5 292 874 A (GEN-PRO 1994 *whole document*	DBE INC.) 8 March	1-29	
Y	US 5 187 775 A (DNASTAN 1993 *whole document*	R, INC.) 16 February	1-29	
٠,		-/		TECHNICAL FIELDS SEARCHED (Int.Cl.6)
				C12N G06F C12P C120
INCO	MPLETE SEARCH			C07K A61K
not compl became	b) Division considers that the present applica y with the EPC to such an extent that a mean I out, or can only be carried out partially, for the arched completely:	incful search into the state of the art ca	do nnot	Autr
Claima se	arched incompletely :			
-	t searched : or the limitation of the search;			
Arti Clai char ther	icle 52 (2)(d) EPC - Pre ims 1-4 concerns compute racterised solely by the reon. However, search ha possible.	er readable media e information stored		
	Place of search	Date of completion of the search		Examiner
	MUNICH	31 July 1998	Cha	kravarty, A
X : parti Y : parti doou	CATEGORY OF CITED DOCUMENTS T: theory or principle underlying the invention E: acrilier patent document, but published on, or after the filling date articularly relevant if combined with another D: document of the arms category Cohnological background L: document sited for other reasons			

EPO FORM 1503 03.62 (PO4C07)



Application Number

EP 97 10 0117

	DOCUMENTS CONSIDERED TO BE RELEVANT		APPLICATION (InLCL6)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
Y	FLEISCHMANN R D ET AL: "WHOLE-GENOME RANDOM SEQUENCING AND ASSEMBLY OF HAEMOPHILUS INFLUENZAE RD" SCIENCE, vol. 269, no. 5223, 28 July 1995, pages 496-498, 507 - 512, XP000517090 * the whole document *	1-29	
X	DATABASE EMBL European Bioinformatics Institute Accession No. U21636, 21 November 1995 ZHANG Q. ET AL.: XP002073245 * abstract *	1-29	TECHNICAL FIELDS
(DATABASE PIR Accession No. S15269, 13 January 1995 KONTINEN V.P. ET AL.: XP002073246 * abstract *	1-29	SEARCHED (Int.Cl.6)
(DATABASE GENESEQ DERWENT Accession No. Q24523, 10 November 1992 YAMAZAKI H. ET AL.: XP002073247 * abstract *	1-29	
	DATABASE PIR Accession No. S54820, 8 July 1995 MAHE B. ET AL.: XP002073248 * abstract *	1-29	
	-/		
	· · · · · · · · · · · · · · · · · · ·		

os osas (Podeno)



Application Numbe

EP 97 10 0117

	DOCUMENTS CONSIDERED TO BE RELEVANT	CLASSIFICATION OF THE APPLICATION (InLCL6)	
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	DATABASE EMBL European Bioinformatics Institute Accession No. X56347, 6 March 1991 HOCH J.A.: XP002073249 * abstract *	1-29	
X	DATABASE PIR Accession number: A53310, 8 September 1995 TANIMOTO K. ET AL.: XP002073250 * abstract *	1-29	
X	DATABASE EMBL European Bioinformatics Institute Accession number: U38418, 9 December 1995 CHUNG Y.J. ET AL.: XP002073251 * abstract *	1-29	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
A	DATABASE SWISSPROT Accession number: P33362, 1 February 1994 RICHTERICH P. ET AL.: XP002073252 * abstract *	1-29	
A	DATABASE PIR Accession number: S29683, 7 October 1994 GLASER P. ET AL.: XP002073253 * abstract *	1-29	
Ä	DATABASE PIR Accession number: S14508, 31 December 1991 SCHREIBER L. ET AL.: XP002073254 * abstract *	1-29	
	·-/		

4



Application Number

EP 97 10 0117

	DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document with indication, where appropriate,	APPLICATION (IntCi.6)	
ategory	of relevant passages	Relevant to claim	
1	DATABASE PIR	1-29	
-	Accession number: Pc1253, 30 September	,	
	1993		
	STUCKA R. ET AL.:		
	XP002073255 * abstract *		
1	DATABASE EMBL	1-29	
	European Bioinformatics Institute		
	Accession number: Z54398, 4 October 1995		
	ODELL, C ET AL.:		
	XP002073256 * abstract *		
	and it act		Trouble or or
Ą	DATABASE EMBL	1-29	TECHNICAL FIELDS SEARCHED (Int.Cl.8)
	European Bioinformatics Institute	1	*
	Accesssion number: U32788, 9 August 1995		
	FLEISCHMANN R.D. ET AL.:		
	XP002073258 * abstract *		
	apstract		
A	DATABASE PIR	1-29	
	Accession number: 164181, 18 August 1995		
	FLEISCHMANN ET AL.:		
	XP002073259		
	* abstract *		
A	DATABASE EMBL	1-29	
••	European Bioinformatics Institute		÷
	Accession number: U32744, 9 August 1995		
	FLEISCHMANN R.D. ET AL.:		
	XP002073260		
	* abstract *		
	-/		
			:
	,		
		1	
		6	
			·
			·

5



Application Number

EP 97 10 0117

	OOCUMENTS CONSIDERED TO BE RELEVANT	CLASSIFICATION OF THE APPLICATION (Int.CI.5)	
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
A	DATABASE PIR Accession number: P31728, 1 July 1993 CHANYANGAM M. ET AL.: XP002073261 * abstract *		
	4		
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
		- Indiana	
		-	
-			-
			·
			' .

6